

REMARKS

Review and reconsideration on the merits are requested.

In response to the rejection under 35 U.S.C. § 112, second paragraph, claims 23 and 27 have been amended to more clearly recite the steps of (a) preparing [obtaining] grains of silver salt of an organic acid [prepared] by reacting a solution...; and (b) applying a coating solution [providing an image forming layer] containing the grains of silver salt...in a binder to form an image-forming layer on at least one surface of a support. Step (b) of claim 36 has been similarly amended.

Claims 23, 27 and 36 were also amended to delete the language “the steps of” to make clear that these claims do not fall under the purview of 35 U.S.C. § 112, sixth paragraph.

It is respectfully submitted that the claims as amended fully comply with 35 U.S.C. § 112, second paragraph, and withdrawal of the foregoing rejection is respectfully requested.

Claims 23-42 were rejected under 35 U.S.C. § 112, first paragraph. The Examiner considered the specification as failing to provide written description support for the claimed method for producing a thermally processed image recording material including step (a) of preparing grains of silver salt of an organic acid using the specific process step defined therein.

Applicants respectfully traverse for the following reasons.

Original claim 19 describes a method for producing a thermally processed image recording material, including a step of applying a coating solution for an image-forming layer containing an aqueous dispersion of grains of silver salt of an organic acid prepared by the

preparation method according to claim 1. Claim 1 defines the specific preparation steps as set forth in step (a) of claim 23.

Independent claim 27 differs from claim 23 in that step (a) calls for preparing grains of silver salt of an organic acid including removing by-product salts by filtration through an ultra filtration membrane during or after the reaction. The subject matter of claim 27 is fully described in original claim 20.

Step (a) of independent claim 36 differs from claim 27 in that it further requires dispersing the silver salt of an organic acid by a high pressure homogenizer or high speed rotary homogenizer in the presence of a dispersing agent. The subject matter of claim 36 is fully described in original claim 21 referring back to the preparation method of claim 10.

As to the working examples, the specification at page 127, lines 18-21 clearly describes that the respective image-forming layers of the thermally processed image recording materials were prepared using the organic acid silver salt grain dispersions of Examples 1-3. Examples 1-3 at pages 81-112 of the specification describe preparation of organic acid silver salt grain dispersions according to all of claims 23, 27 and 36. See Table 1 at page 88 (Dispersions B, D and F); in Table 2 at page 107 (Dispersions BB, CC, DD, EE, GG, JJ, LL and MM); and in Table 3 at page 111 of the specification (Dispersion BBB). For example, Dispersion B as described at pages 83-84 (Example 1) was prepared using the apparatus of Fig. 3 corresponding to step (a) of claim 23.

Moreover, page 12 of the specification describes that the invention provides a method for producing a thermally processed image recording material, including a step of applying a coating

solution for image-forming layer containing an aqueous dispersion of grains of silver salt of an organic acid prepared by any one of the aforementioned preparation methods. These “aforementioned” preparation methods include step (a) of each of claims 23, 27 and 36. See the method that is described at pages 9-10 of the specification.

For the above reasons, it is respectfully submitted that claims 23-42 find full support in the specification as originally filed, and withdrawal of the foregoing rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Claims 23-42 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,783,925 to Yasuda. As to claim 23, the Examiner cited the process disclosed in the Examples at cols. 58-82 and specifically Example 1. The Examiner further cited Yasuda at col. 10, with respect to the ultra-filtration step of claims 27 and 36, and to the Abstract with respect to the dispersing step of claim 36.

Applicants traverse, and respectfully request the Examiner to reconsider for the following reasons.

The independent claims are claims 23, 27 and 36.

Importantly, claim 23 requires a method in which the solution containing silver ions is supplied into a reaction field solution before being introduced into the sealed mixing means. In reference to Fig. 3 of the present specification, water (the reaction field) is initially circulated through the pipeline mixer 37 (i.e., the sealed mixing means). The aqueous solution of silver nitrate is then added, via pump 33 and as shown by the arrow, before being introduced into the sealed mixing means 37. On the other hand, as clearly shown in Fig. 2 of Yasuda, the silver ion

solution in tank 11 is introduced via pump 15 directly into closed mixing apparatus 18, and is not supplied into a reaction field solution before being introduced into the sealed mixing means as required by present claim 23.

Even if one or both of the silver ion-containing solution and the solution of a fatty acid alkali metal salt were to be added upstream of the closed mixing apparatus, Yasuda still would not meet the terms of claim 23 which require supplying the solution containing silver ions into a reaction field solution before being introduced into the sealed mixing means. That is, Yasuda does not disclose circulating water (reaction field solution) in advance through the pipeline mixer.

Therefore, Yasuda does not disclose and therefore does not anticipate the invention of claims 23-26.

Claim 27 essentially requires the step of “removing by-product salts by ultra-filtration after or during the dispersing operation to obtain an aqueous dispersion of grains of silver salt of an organic acid”. Claim 36 essentially requires the step of “removing by-product salts by ultra-filtration after or during the dispersing operation to obtain an aqueous dispersion of grains of silver salt of an organic acid”. Yasuda fails to concretely disclose the claimed ultra-filtration steps. Namely, the working examples including Example 1 of Yasuda do not employ ultra-filtration. Rather, suction filtration is used. Thus, Yasuda does not concretely disclose every limitation of Claim 27 or every limitation of Claim 36, and therefore Yasuda does not anticipate claims 27 and 36.

Withdrawal of the foregoing rejection under 35 U.S.C. § 102(e) is respectfully requested.

Claims 23-42 were rejected under 35 U.S.C. § 102(a) as being anticipated by EP 1069468 (EP '468). The Examiner cited to page 18 and pages 20-21 as disclosing the claimed method including forming the silver salt of an organic acid using a closed mixing means.

Applicants respectfully traverse for the following reasons.

Similar to Yasuda, Fig. 2 of EP '468 shows silver ion solution in tank 11 being introduced via pump 15 directly into the closed mixing apparatus 18, whereas claim 23 requires supplying the solution containing silver ions into a reaction field solution before being introduced into the sealed mixing means. Even if both liquids "A" and "B" were to be added in the upstream side of the closed mixing apparatus, EP '468 still does not meet the terms of claim 23 because a reaction field solution is not first circulated through closed mixing apparatus 18.

As to claims 27 and 36, there is no disclosure in EP '468 of the claimed ultra filtration step.

Because EP '468 does not disclose each and every element of the claimed invention, it is respectfully submitted that claims 23-42 are not anticipated by EP '468, and withdrawal of the foregoing rejection under 35 U.S.C. § 102(a) is respectfully requested.

Claims 23-42 were rejected under 35 U.S.C. § 102(a) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over EP 1 063 566 (EP '566). The Examiner acknowledged that EP '566 may not disclose the claimed process for forming a silver salt of an organic acid in a sealed mixing means. However, considering that such is said to be disclosed in the prior art, and in the absence of a showing of criticality in the claimed process, the Examiner

considered the present claims to be either anticipated or prima facie obvious over the prior art of record.

Applicants respectfully traverse for the following reasons.

Present claim 23 is directed to a method including specifically claimed method steps. Because EP '566 does not disclose preparing grains of a silver salt of an organic acid using sealed mixing means, EP '566 does not teach each and every limitation of claim 23 and therefore does not and can not anticipate claim 23.

Claim 27 also essentially requires "sealed mixing means" not disclosed by EP '566. Furthermore, criticality in the claimed process using the sealed mixing means is demonstrated by the test data in Table 1 at page 88 of the specification. Thus, claims 23 and 27 are also unobvious over EP '566.

With respect to the rejection of claims 36-42, Applicants submit herewith the Verified English Translation of Japanese Patent Application No. 236044/2000 filed August 3, 2000 from which benefit is claimed under 35 U.S.C. § 119(a). The August 3, 2000 filing date of the priority application antedates the December 27, 2000 publication date of EP '566 to thereby obviate the rejection as to claims 36-42. The subject matter of claims 36-42 is fully described in paragraphs [0016] to [0018] of the priority document.

Withdrawal of the foregoing rejection is respectfully requested.

Claims 23-42 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over EP 0 962 812 (EP '812). The Examiner acknowledged that EP '812 may not disclose a process for forming a silver salt of an organic

acid in a sealed mixing means. However, because the claims are directed to a process of producing an image recording material but not to preparing grains of a silver salt of an organic acid *per se*, the Examiner considered such limitation to not be material in the absence of a showing of criticality in the claimed process of forming the grains of a silver salt of an organic acid.

Claims 23 and 27 essentially require “sealed mixing means”. Similar to EP ‘566, EP ‘812 also fails to disclose the sealed mixing means therefore. Therefore, claims 23 and 27 are not and can not be anticipated by EP ‘812. Furthermore, criticality in the claimed process using the sealed mixing means is fully shown in the data in Table 1 at page 88 of the present specification. Therefore, claims 23 and 27 are also not obvious over EP ‘812.

Claim 36 does not essentially require “sealed mixing means” but does require the step of “removing by-product salts by ultra-filtration after or during the dispersing operation to obtain an aqueous dispersion of grains of silver salt of an organic acid”. EP ‘812 states in [0084] that ultra-filtration and suction filtration can be used in the desalting step. The first sentence in [0085] indicates that dispersion is carried out after the desalting. In the working example, dispersion is carried out after the desalting, (i.e., after suction filtration). See paragraphs [0223] and [0224]. That is, ultra-filtration after or during dispersion as required by claim 36 is not disclosed or suggested in EP ‘812. Therefore, claim 36 is neither anticipated nor obvious over EP ‘812.

Withdrawal of the foregoing rejection is respectfully requested.

Withdrawal of all rejections and allowance of claims 23-42 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Abraham J. Rosner
Registration No. 33,276

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 15, 2005